
IN THE CLAIMS

1. (Currently Amended) An image, comprising:

an image, wherein the image contains two or more layers of digital data
steganographically encoded in a digital watermark, where the image contains two
or more image objects and where at least one layer of data is associated with each
image object of the two or more image objects.

2. (Original) The image of claim 1, wherein the two or more layers of data are encoded in a high coding rate watermark.

3. (Original) The image of claim 1, wherein the watermark contains two or more sub-watermarks, each sub-watermark of a differing encoding method and/or transform.

4. (Original) The image of claim 3, wherein each layer of the two or more layers of data are encoded into a selected sub-watermark.

5. (Original) The image of claim 1, wherein each of the two or more layers of data contain one or more data areas.

6. (Original) The image of claim 1, wherein the image contains one or more image objects, where at least one image object contains two or more layers of data encoded in a watermark.

7. (Original) The image of claim 1, wherein the two or more layers of data of the image includes at least one of a manufacturer information layer, an object characteristics layer, an order information layer, and a manufacturer designated layer.

8. (Currently Amended) An image, comprising:

an image, wherein the image contains two ~~one~~ or more sub-images, where at least one sub-image of the two or more sub-images contains two or more layers of data in a watermark encoded in the at least one image object.



9. (Original) The image of claim 8, wherein the two or more layers of data are encoded in a high coding rate watermark.
10. (Original) The image of claim 8, wherein the watermark contains two or more sub-watermarks, each sub-watermark of a differing encoding method and/or transform.
11. (Currently Amended) A method of watermarking an image, comprising:
associating metadata with each image object of two or more image objects of an image;
and
encoding the metadata into two or more data layers of a digital watermark of the image
~~metadata into an image in a watermark, wherein one or more selected data layers~~
~~of the two or more data layers encodes the metadata associated with a selected~~
~~image object of the two or more image objects.~~
12. (Currently Amended) The method of claim 11, wherein encoding the metadata into two or more data layers of a digital watermark of the image ~~metadata into an image in a watermark~~ further comprises encoding the metadata into two or more data layers of a digital watermark of the image, where the watermark is ~~metadata into an image in a~~ high coding rate watermark.
13. (Currently Amended) The method of claim 11, wherein encoding the metadata into two or more data layers of a digital watermark of the image ~~metadata into an image in a watermark~~ further comprises encoding the metadata into two or more data layers of a digital watermark of the image ~~metadata into an image in a watermark~~, where the watermark contains two or more sub-watermarks, each sub-watermark of a differing encoding method and/or transform.
14. (Currently Amended) The method of claim 13, wherein each layer of the two or more data layers ~~of metadata~~ are encoded into a selected sub-watermark.
15. (Currently Amended) The method of claim 11, encoding the metadata into two or more data layers of a watermark of the image ~~metadata into an image in a watermark~~ further

comprises encoding one or more data areas in at least one of the two or more data layers of ~~metadata~~ the watermark.

16. (Original) The method of claim 11, further comprising:
encoding two or more layers of metadata in a watermark in one or more image objects of the image.
17. (Currently Amended) The method of claim 11, wherein encoding the metadata into two or more data layers of a digital watermark of the image ~~metadata into an image in a watermark~~ further comprises encoding at least one of a manufacturer information layer, an object characteristics layer, an order information layer, and a manufacturer designated layer.
18. (Currently Amended) A method of watermarking at least one sub-image of an image, comprising:
encoding ~~a the~~ plurality of layers of data in a digital watermark in the of at least one sub-image of an image, wherein the plurality of layers of data are metadata associated with the at least one sub-image.
19. (Currently Amended) The method of claim 18, wherein encoding the plurality of layers of data in a digital watermark in the of at least one sub-image of the image further comprises encoding the plurality of layers of data in a high coding rate watermark.
20. (Currently Amended) The method of claim 18, wherein encoding the plurality of layers of data in a digital watermark in the of at least one sub-image of the image further comprises encoding the plurality of layers of data in a watermark containing a plurality of sub-watermarks, each sub-watermark encoded with a different encoding method and/or transform.
21. (Original) The method of claim 20, wherein each layer of the plurality of layers of data are encoded into a separate sub-watermark.

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22. (Currently Amended) The method of claim 18, wherein encoding the plurality of layers of data in a digital watermark in the of at least one sub-image of the image further comprises encoding one or more data areas in the two or more layers of data of the at least one sub-image.
23. (Currently Amended) A computer-usable medium having computer-readable instructions stored thereon for execution by a processor to perform a method comprising:
associating metadata with each image object of two or more image objects of an image;
and
encoding the metadata into two or more data layers of a digital watermark of the image
metadata into an image in a watermark, wherein one or more selected data layers
of the two or more data layers encodes the metadata associated with a selected
image object of the two or more image objects.
24. (Currently Amended) The computer-usable medium of claim 23, wherein encoding the metadata into two or more data layers of a digital watermark of the image ~~metadata into an image~~ further comprises encoding the metadata into two or more data layers of a digital watermark of each image object of ~~metadata in~~ one or more image objects of the image, where the metadata associated with a selected object ~~each~~ of the one or more image objects is encoded in a the watermark placed in the selected image object.
25. (Currently Amended) The computer-usable medium of claim 23, wherein the two or more data layers ~~of metadata~~ are encoded in a high coding rate watermark.
26. (Original) The computer-usable medium of claim 23, wherein the watermark contains two or more sub-watermarks, each sub-watermark of a differing encoding method and/or transform.
27. (Currently Amended) The computer-usable medium of claim 26, wherein each of the two or more data layers ~~of metadata~~ are encoded into a selected sub-watermark.

28. (Currently Amended) A method of operating a printer, comprising:
- receiving a print job containing an image and two or more layers of metadata, wherein one or more layers of metadata of the two or more layers of the metadata are associated with each image object of one or more image objects of the image; and steganographically encoding the two or more layers of metadata into a digital watermark in an image.
29. (Currently Amended) The method of claim 28, wherein steganographically encoding the two or more layers of metadata into a digital watermark in an image further comprises encoding the two or more layers of metadata in a high coding rate watermark in an image.
30. (Currently Amended) The method of claim 28, wherein steganographically encoding the two or more layers of metadata into a digital watermark in an image further comprises encoding the two or more layers of metadata into a watermark containing a plurality of sub-watermarks, each sub-watermark encoded with a different encoding method and/or transform.
31. (Original) The method of claim 30, wherein each layer of the two or more of layers of metadata are encoded into a separate sub-watermark.
32. (Currently Amended) The method of claim 28, wherein steganographically encoding two or more layers of metadata into a digital watermark in an image further comprises encoding the two or more layers of metadata into a watermark in one or more image objects of the image.
33. (Currently Amended) The method of claim 28, wherein steganographically encoding two or more layers of metadata into a digital watermark in an image further comprises selecting a subset of the two or more layers of metadata and encoding the subset layers of metadata in the image.

34. (Original) The method of claim 33, wherein selecting a subset of the two or more layers of metadata and encoding the subset layers of metadata in the image further comprises printing the subset layers of metadata as text with the image.
35. (Original) The method of claim 33, wherein selecting a subset of the two or more layers of metadata and encoding the subset layers of metadata in the image further comprises selecting the subset of the two or more layers of metadata via user selection of the subset at the printer.
36. (Original) The method of claim 33, wherein selecting a subset of the two or more layers of metadata and encoding the subset layers of metadata in the image further comprises selecting the subset of the two or more layers of metadata by entry of a PIN and/or a user ID at the printer.
37. (Original) The method of claim 28, wherein receiving a print job containing an image and two or more layers of metadata further comprises receiving and retaining at the printer a print job containing an image and two or more layers of metadata.
38. (Original) The method of claim 28, wherein receiving a print job containing an image and two or more layers of metadata further comprises receiving a print job containing an image and two or more layers of metadata, wherein the print job is defined in a page description language (PDL) having at least one raster or vector data section and at least one metadata section.
39. (Original) The method of claim 38, wherein receiving a print job containing an image and two or more layers of metadata, wherein the print job is defined in a page description language (PDL) having at least one raster or vector data section and at least one metadata section further comprises receiving a print job containing an image and two or more layers of metadata, wherein the print job is defined in a page description language (PDL) having one or more image objects, each image object defined with a raster or vector data section and a metadata section.

40. (Original) The method of claim 38, wherein the page description language (PDL) is one of PCL5, PCL6, and Postscript.
41. (Currently Amended) A method of accessing data encoded in an image, comprising:
decoding a digital watermark containing two or more layers of data with a reader,
wherein one or more selected layers of data of the two or more data layers
encodes metadata associated with an image object of two or more image objects
in the image; and
selecting an image object of two or more image objects and a subset of the two or more
data layers which contains the metadata for the selected image object to view.
42. (Currently Amended) The method of claim 41, further comprising:
selecting an image object having a digital watermark.
43. (Currently Amended) The method of claim 41, wherein decoding a digital watermark
containing two or more layers of data with a reader further comprises decoding a high
coding rate watermark containing two or more layers of data with a reader.
44. (Currently Amended) The method of claim 41, wherein decoding a digital watermark
containing two or more layers of data with a reader further comprises decoding two or
more layers of data from a digital watermark containing a plurality of sub-watermarks,
each sub-watermark encoded with a different encoding method and/or transform.
45. (Currently Amended) The method of claim 41, wherein selecting an image object of two or
more image objects and a subset of the two or more data layers which contains the
metadata for the selected image object to view further comprises selecting an image
object of two or more image objects and a subset of the two or more data layers to view
via one of a user input to the reader, a configuration input to the reader, and an input of a
user ID and/or PIN to the reader.
46. (Original) The method of claim 41, further comprising:
executing a further process based on information incorporated in the selected subset of
data layers.

47. (Original) The method of claim 46, wherein executing a further process based on information incorporated in the selected subset of data layers further comprises executing a further process to accomplish one of accessing the internet, accessing a database, accessing a program, enabling execution of an application, enabling access to a computer system, and decoding encrypted content.
48. (Currently Amended) A method of defining multiple layers of metadata for a watermark in an image, comprising:
associating two or more image objects of an image with two or more layers of metadata in an application, wherein one or more metadata layers of the two or more layers of metadata encodes metadata associated with an image object of the two or more image objects; and
encoding the image and two or more layers of metadata into a page description language (PDL) definition of the image with a steganographically encoded digital watermark of the two or more layers of metadata.
49. (Currently Amended) The method of claim 48, wherein encoding the image and two or more layers of metadata into a page description language (PDL) definition of the image with a steganographically encoded digital watermark of the two or more layers of metadata further comprises encoding the two or more layers of metadata into a page description language (PDL) definition for a high coding rate watermark.
50. (Currently Amended) The method of claim 48, wherein encoding the image and two or more layers of metadata into a page description language (PDL) definition of the image with a steganographically encoded digital watermark of the two or more layers of metadata further comprises encoding the two or more layers of metadata into a page description language (PDL) definition for a watermark containing a plurality of sub-watermarks, each sub-watermark encoded with a different encoding method and/or transform.
51. (Original) The method of claim 50, wherein each layer of the two or more of layers of metadata are encoded into a separate sub-watermark.

52. (Currently Amended) The method of claim 48, wherein encoding two or more layers of metadata and image into a page description language (PDL) definition of the image with a steganographically encoded digital watermark of the two or more layers of metadata further comprises encoding the two or more layers of metadata into a digital watermark of one or more image objects of the image.
53. (Currently Amended) The method of claim 48, wherein associating two or more image objects of an image with two or more layers of metadata in an application, wherein one or more metadata layers of the two or more layers of metadata encodes metadata associated with an image object of the two or more image objects and encoding the image and two or more layers of metadata into a page description language (PDL) definition further comprises associating each image object of the two or more image objects of the image with two or more layers of metadata and encoding a page description language (PDL) definition of the image having each of the two or more layers of metadata of each image object encoded in a watermark of the image object.
54. (Currently Amended) The method of claim 48 ~~claim 53~~, wherein associating ~~one~~ two or more image objects of the image with two or more layers of metadata further comprises associating ~~one~~ two or more image objects of the image with two or more layers of metadata, where the two or more layers of metadata are associated with each image object by selecting the image object and defining the metadata layers by one of a right click on the image object, selecting a menu item, entering the metadata in a spreadsheet page associated with the selected image object, and defining the metadata for the selected image object in an associated configuration file.
55. (Original) The method of claim 48, wherein the page description language (PDL) is one of PCL5, PCL6, and Postscript.
56. (Original) The method of claim 48, wherein encoding the image and two or more layers of metadata into a page description language (PDL) definition further comprises encoding the image and two or more layers of metadata into a page description language (PDL) definition, wherein the PDL contains at least one raster or vector data section and at least one metadata section.

57. (Original) The method of claim 56, wherein encoding the image and two or more layers of metadata into a page description language (PDL) definition, wherein the PDL contains at least one raster or vector data section and at least one metadata section further comprises encoding the image and two or more layers of metadata into a page description language (PDL) definition, wherein the PDL contains one or more image objects, each image object defined with a raster or vector data section and a metadata section.
58. (Original) The method of claim 48, wherein encoding the image and two or more layers of metadata into a page description language (PDL) definition further comprises selecting a subset of the two or more layers of metadata and encoding the subset layers of metadata in the PDL.